## **Listing of Claims:**

1-19 (Canceled)

20. (Previously presented) A method of preparing an assay sample for detecting bacteria by a flow cytometer, comprising:

providing a diluent comprising a cationic surfactant, a buffer for maintaining a pH of 2.0-4.5 and an effective amount of a substance capable of reducing nitrite ions and a staining solution comprising a polymethine dye for staining bacteria;

mixing a urine sample with the diluent; and

preparing the assay sample by mixing the mixture of the urine sample and the diluent with the staining solution;

wherein the polymethine dye is at least one selected from the following group consisting of:

(1) Thiazole Orange;

(2)

$$\begin{array}{c|c} H_3C & CH_3 \\ \hline \\ + \\ N \\ CH_3 & CIO_4 \end{array} \begin{array}{c} - \\ \end{array}$$

(3)

(4)

(5)

(6) S  $CH=CH-CH=N(CH_2)_3N(CH_3)_3$   $CH_3$   $CH_3$   $CH_3$   $CH_3$ 

(7)

$$S = \begin{pmatrix} CH_{3} \\ (CH_{2})_{3} \\ N - \begin{pmatrix} C - C \\ C - C \end{pmatrix} = \begin{pmatrix} C - C \\ N - C \end{pmatrix} = \begin{pmatrix} C - C \\$$

(8)

(9)

$$\begin{array}{c|c}
& O \\
& N \\
& F \\
& F \\
& NH
\end{array}$$

$$\begin{array}{c|c}
& O \\
& H \\
& O \\$$

(10) a compound represented by the following general formula:

$$R_3$$
 $Z$ 
 $H$ 
 $C$ 
 $H$ 
 $C$ 
 $R_5$ 
 $R_5$ 
 $R_5$ 

wherein  $R_1$  is a hydrogen atom or a  $C_{1-3}$  alkyl group;  $R_2$ - and  $R_3$  are a hydrogen atom, a  $C_{1-3}$  alkyl group or a  $C_{1-3}$  alkoxy group;  $R_4$  is a hydrogen atom, an acyl group or a  $C_{1-3}$  alkyl group;  $R_5$  is a hydrogen atom or a  $C_{1-3}$  alkyl group which may be substituted; Z is a sulfur atom, an oxygen atom or a carbon atom substituted with a  $C_{1-3}$  alkyl group; n is 1 or 2;  $X^n$  is an anion; and

(11) a compound represented by the following general formula:

$$R_7$$
 $Z$ 
 $H$ 
 $H$ 
 $H$ 
 $H$ 
 $R_9$ 
 $R_6$ 
 $X^-$ 

wherein  $R_6$  is a hydrogen atom or a  $C_{1-18}$  alkyl group;  $R_7$  and  $R_8$  are a hydrogen atom, a  $C_{1-3}$  alkyl group or a  $C_{1-3}$  alkoxy group;  $R_9$  is a hydrogen atom, an acyl group or a  $C_{1-18}$  alkyl group; Z is sulfur, oxygen or a carbon atom having a  $C_{1-3}$  alkyl group; n is 0, 1 or 2; X is an anion; and

wherein the cationic surfactant is a quaternary ammonium salt represented by the following formula:

$$R^{10}$$
 $R^{11}$ 
 $N^{+}$ 
 $R^{13}$ 
 $R^{12}$ 

wherein  $R^{10}$  is a  $C_{6-18}$  alkyl group or a benzyl group;  $R^{11}$ ,  $R^{12}$  and  $R^{13}$ , the same or different, are a  $C_{1-3}$  alkyl group or a benzyl group; Y- is a halogen ion.

- 21. (Previously Presented) The method according to claim 20, wherein the substance capable of reducing nitrite ions is selected from the group consisting of: ascorbic acid, isoascorbic acid, aminomethanesulfonic acid, aminomethanesulfonic acid, glutamic acid, asparatic acid, mercaptoacetic acid, 3-mercaptopropionic acid, sulfamic acid, sulfamilic acid, sulfurous acid, pyrosulfurous acid, phosphinic acid, glycine, glutamine, asparagine, methionine, glutathione, cysteine, hydroxylamine and salts thereof; sulfanilamide; aminomethane; mercaptoethanol; thiophenol and urea.
  - 22. (Canceled)
  - 23. (Canceled)
- 24. (Previously Presented) The method according to claim 20, wherein the quaternary ammonium salt is at least one selected from the group consisting of: decyl trimethyl ammonium salt,

dodecyl trimethyl ammonium salt, tetradecyl trimethyl ammonium salt, hexadecyl trimethyl ammonium salt and octadecyl trimethyl ammonium salt.

- 25. (Canceled)
- 26. (Previously Presented) The method according to claim 20, wherein the diluent has pH of 2.0-3.0.
  - 27. (Canceled)
- 28. (Previously Presented) The method according to claim 20, wherein the buffer is at least one selected from the group consisting of: citric acid-NaOH, potassium dihydrogen phosphate-disodium hydrogen phosphate, potassium dihydrogen phosphate-NaOH, citric acid- disodium hydrogen phosphate, potassium hydrogen phthalate-NaOH, succinic acid-NaOH, lactic acid-NaOH, ε-aminocaproic acid-HCl, fumaric acid-HCl, β-alanine-NaOH and glycine-NaOH.
- 29. (Previously Presented) The method according to claim 20, wherein the diluent comprises an inorganic salt of either sulfate or nitrate.
- 30. (Previously Presented) The method according to claim 20, wherein the dye is present at 0.1 to 100 ppm in the assay sample.
- 31. (Previously Presented) The method according to claim 20, wherein the cationic surfactant exists at 10 to 30000 mg/l in the assay sample.
  - 32. (Canceled)
  - 33. (Canceled)
  - 34. (Canceled)
- 35. (Previously Presented) The method according to claim 20, wherein the staining solution comprises a water-soluble organic solvent.
- 36. (Previously Presented) The method according to claim 35, wherein the water-soluble organic solvent is selected from the group consisting of methanol, ethanol and ethylene glycol.

- 37. (Previously Presented) The method according to claim 35, wherein the water-soluble organic solvent comprises ethylene glycol.
  - 38. (Previously Presented) A method of staining bacteria comprising:

providing a diluent comprising a cationic surfactant, a buffer for maintaining a pH of 2.0-4.5 and an effective amount of a substance capable of reducing nitrite ions and a staining solution comprising a polymethine dye for staining bacteria;

mixing a urine sample with the diluent; and

mixing the mixture of the urine sample and the diluent with the staining solution;

wherein the polymethine dye is at least one selected from the following group consisting of:

(1) Thiazole Orange;

(2)

$$\begin{array}{c|c} H_3C & CH_3 \\ \hline \\ N & CIO_4 \end{array} \\ \begin{array}{c|c} CH_3 & CIO_4 \end{array}$$

(3)

$$S$$
 $N$ 
 $ClO_4$ 

(4)

(6) 
$$S$$
  $CH=CH-CH=N(CH_2)_3N(CH_3)_3$   $CH_3$   $CH_3$   $CH_3$   $CH_3$   $CH_3$ 

(8)

(9)

(10) a compound represented by the following general formula:

$$R_3$$
 $Z$ 
 $H$ 
 $C$ 
 $C$ 
 $C$ 
 $R_4$ 
 $R_5$ 
 $R_5$ 

wherein  $R_1$  is a hydrogen atom or a  $C_{1-3}$  alkyl group;  $R_2$ - and  $R_3$  are a hydrogen atom, a  $C_{1-3}$  alkyl group or a  $C_{1-3}$  alkoxy group;  $R_4$  is a hydrogen atom, an acyl group or a  $C_{1-3}$  alkyl group;  $R_5$  is a hydrogen atom or a  $C_{1-3}$  alkyl group which may be substituted; Z is a sulfur atom, an oxygen atom or a carbon atom substituted with a  $C_{1-3}$  alkyl group; n is 1 or 2;  $X^0$  is an anion; and

(11) a compound represented by the following general formula:

$$R_7$$
 $Z$ 
 $H$ 
 $C$ 
 $C$ 
 $C$ 
 $N$ 
 $R_9$ 
 $R_8$ 
 $X^-$ 

wherein  $R_6$  is a hydrogen atom or a  $C_{1-18}$  alkyl group;  $R_7$  and  $R_8$  are a hydrogen atom, a  $C_{1-3}$  alkyl group or a  $C_{1-3}$  alkoxy group;  $R_9$  is a hydrogen atom, an acyl group or a  $C_{1-18}$  alkyl group; Z is sulfur, oxygen or a carbon atom having a  $C_{1-3}$  alkyl group; Z is 0, 1 or 2; Z is an anion; and

wherein the cationic surfactant is a quaternary ammonium salt represented by the following formula:

wherein  $R^{10}$  is a  $C_{6-18}$  alkyl group or a benzyl group;  $R^{11}$ ,  $R^{12}$  and  $R^{13}$ , the same or different, are a  $C_{1-3}$  alkyl group or a benzyl group; Y- is a halogen ion.